

Appendix N

The Public Scoping Process

N.1 SCOPING PROCESS DESCRIPTION

An early step in the development of a programmatic environmental impact statement (PEIS) following the guidance and requirements contained in the Council on Environmental Quality and the Department of Energy (DOE) regulations is to initiate “an early and open process for determining the scope of the issues to be addressed and for identifying the significant issues related to the proposed action.” Major purposes of this scoping process include (1) informing the public about the proposed action; (2) obtaining input from the public and other concerned entities on significant issues that should be evaluated in this *Programmatic Environmental Impact Statement for Accomplishing Expanded Civilian Nuclear Energy Research and Development and Isotope Production Missions in the United States, Including the Role of the Fast Flux Test Facility (Nuclear Infrastructure Programmatic Environmental Impact Statement [NI PEIS])*; (3) identifying and eliminating from detailed study issues that are not significant or have been addressed by other environmental reviews; (4) determining appropriate roles for lead and cooperating agencies, as needed; (5) identifying other environmental review and consultation requirements; and (6) indicating how the preparation of this NI PEIS relates to the agency’s planning and decision-making processes (40 CFR Section 1501.7). As shown in **Figure N–1**, the scoping process is one of the opportunities for public involvement required as part of the National Environmental Policy Act (NEPA) process.

On October 5, 1998, DOE published a Notice of Intent in the Federal Register (63 FR 53398) to prepare an environmental impact statement (EIS) on the proposed production of plutonium-238 for use in advanced radioisotope power systems for future space missions. With that announcement, DOE began preparing the *Environmental Impact Statement for the Proposed Production of Plutonium-238 for Use in Advanced Radioisotope Power Systems for Future Space Missions (Plutonium-238 Production EIS)*. The scope of the *Plutonium-238 Production EIS* was established through a public scoping process conducted from November 4, 1998, through January 4, 1999, as shown in **Table N–1**. As part of the scoping process for that EIS, DOE announced that the Fast Flux Test Facility (FFTF) would not be considered a reasonable alternative for the plutonium-238 production mission unless restart of the facility was proposed for other reasons.

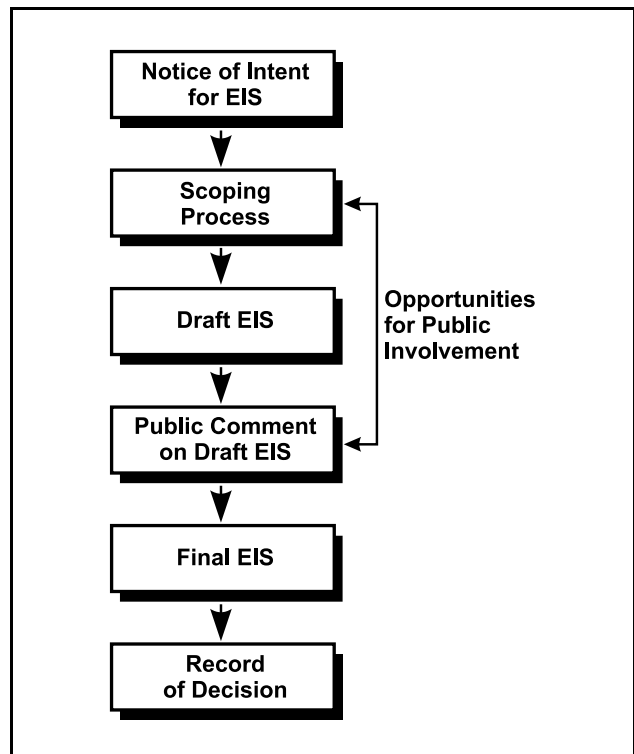


Figure N–1 NEPA Process

The Secretary of Energy subsequently announced on August 18, 1999, that DOE would prepare this NI PEIS. Because plutonium-238 production would be among the missions considered in this NI PEIS, the scope of the *Plutonium-238 Production EIS* in its entirety was incorporated within the scope of this NI PEIS, and preparation of the *Plutonium-238 Production EIS* as a separate NEPA review was terminated. As such, DOE reviewed and considered all comments originally received from the public during the *Plutonium-238 Production EIS* scoping period in the preparation of this NI PEIS.

Table N-1 Schedule of Public Scoping Meetings

Location	Date	Approximate Number of Attendees
Plutonium-238 Production EIS Scoping Meetings—1998		
Idaho Falls, Idaho	November 12	20
Oak Ridge, Tennessee	November 17	30
Richland, Washington	November 19	200
Total		250
NI PEIS Scoping Meetings—1999		
Oak Ridge, Tennessee	October 13	30
Idaho Falls, Idaho	October 15	20
Seattle, Washington	October 18	200
Portland, Oregon	October 19	300
Hood River, Oregon	October 20	300
Richland, Washington	October 21	200
Washington, D.C.	October 27	60
Total		1,110

On September 15, 1999, DOE published a Notice of Intent in the Federal Register (64 FR 50064) to prepare this NI PEIS. DOE held scoping meetings in October 1999, as shown in Table N-1. This Notice of Intent initiated the 45-day scoping period. Based on comments from participants who attended the *Plutonium-238 Production EIS* scoping meetings, additional scoping meetings were held in the Pacific Northwest related to this NI PEIS. The Pacific Northwest meeting locations included Seattle and Richland, Washington, and Portland and Hood River, Oregon. Meetings were held in Oak Ridge, Tennessee, and Idaho Falls, Idaho, and a meeting was also added in Washington, D.C., to accommodate national interest groups and others.

As a result of previous experience and positive responses from attendees of other DOE/NEPA public meetings and hearings, DOE chose an interactive format for the scoping meetings. Each meeting began with a presentation by the DOE EIS Document Manager, who explained the proposed action and planned scope of the subject PEIS, and answered questions on the presentation. Afterwards, an impartial facilitator opened the floor for comments and concerns from the audience. DOE, national laboratory staff, and contractor personnel were available to respond to the questions and comments, as needed. A verbatim transcript of public comments and DOE responses was prepared by court reporters who attended each of the meetings. The transcripts were made available to the public at DOE reading rooms and on the Internet at www.ne.doe.gov. Reading room locations are shown in **Table N-2**. Written statements or comments from the public were collected at the meetings. In addition, the public was encouraged to submit comments to DOE by U.S. mail, electronic mail, a toll-free fax line, and a toll-free telephone line until the end of the scoping comment period. Comments received after that date were considered to the extent practicable.

The comments received during the *Plutonium-238 Production EIS* and NI PEIS scoping periods are described in the following sections.

Table N–2 Public Information Centers

Location	Address
Idaho	U.S. Department of Energy Public Reading Room 1776 Science Center Drive Idaho Falls, ID 83415 (208) 526-1144
Oregon	Portland State University Bradford Price Miller Library Government Documents Section 951 Southwest Hall Portland, OR 97207 (502) 725-3690
Tennessee	U.S. Department of Energy Public Reading Room Building 1916-T-2, Suite 300 230 Warehouse Road Oak Ridge, TN 37830 (423) 241-4780
Washington	U.S. Department of Energy Public Reading Room Consolidated Information Center, Room 101L 2770 University Drive Richland, WA 99352 (509) 372-7443 Gonzaga University Foley Center Library East 502 Boone Spokane, WA 99258 (509) 323-6532 Richland Public Library 955 Northgate Drive Richland, WA 99352 (509) 942-7457 University of Washington Suzzallo Library Government Publications Room Box 352900 Seattle, WA 98195 (206) 543-1937
Washington, D.C.	U.S. Department of Energy Freedom of Information Public Reading Room Forrestal Building, Room IE-190 1000 Independence Ave, SW Washington, DC 20585 (202) 586-3142

N.1.1 Plutonium-238 Production EIS Scoping Comments

DOE received approximately 750 comments from about 245 citizens, interested groups, and Federal, state, and local officials during the public scoping period for the *Plutonium-238 Production EIS*. About 220 of these comments were presented orally during the public meetings. Approximately half of all the commentors (117) were supportive of the proposed plutonium-238 production mission, 105 were opposed to plutonium-238 production, and 23 commentors were neither for nor against the proposal.

In general, the people who attended the meetings in Idaho and Tennessee were supportive of DOE's proposed plans to produce plutonium-238 domestically for future space missions. In Richland, Washington, the meeting was attended by representatives of several stakeholder and environmental groups who voiced opposition to DOE's consideration of using FFTF for plutonium-238 production.

Other main concerns of the Richland, Washington, meeting participants were that DOE should not consider restarting FFTF, that DOE has worked hard over the years to change Hanford's mission from "production" to "cleanup," and that DOE should continue to honor its commitment to cleanup. There were concerns about the generation of additional waste streams at the site and the operational safety of FFTF. There was strong opposition to the restart of FFTF for any mission.

Of all the comments submitted during the scoping period, approximately 320 concerned the Hanford Site. Of these Hanford-specific comments, there were roughly equal numbers of comments supporting and opposing the use of FFTF and the Fuels and Materials Examination Facility for plutonium-238 production. The major concern of those in opposition was that DOE should not consider restarting FFTF and should continue to honor DOE's commitment to the cleanup at Hanford, rather than introducing a new production mission. The safety of FFTF, potential for further contamination, and generation of additional waste streams were concerns expressed by commentors.

About 65 of the comments concerned the use of plutonium-238 in space, or the National Aeronautics and Space Administration (NASA) Space Program in general. The majority of the space-related comments were in opposition to the use of plutonium-238 in space because of concerns about the safety of radioisotope power systems.

Approximately 45 of the comments addressed issues related to waste management, including concerns about the amount of waste generated by the program, the processing and final disposition of all generated wastes, and the impact of additional wastes on the ongoing environmental cleanup programs at the sites.

The cost of the plutonium-238 production program was another concern expressed by commentors. About 45 comments included requests for information related to the costs of each alternative. Several commentors also proposed additional alternatives for consideration in the EIS.

The following general issues and concerns are highlights of the comments made.

- It was suggested that additional irradiation service alternatives such as commercial light water reactors and accelerators should be considered.
- It was suggested that additional storage, target fabrication, and target processing alternatives should be considered, such as the Hot Fuel Examination Facility at Argonne National Laboratory–West and the H-Canyon and HB-Line at the Savannah River Site.
- Concerns were voiced about additional waste streams being generated, including what the waste streams would be and how they would be disposed. Concerns were also related to the generation and disposal of any transuranic waste since non-defense-related wastes are not eligible for disposal at the Waste Isolation Pilot Plant.
- It was suggested that the cost of implementing the various alternatives should be analyzed, and a cost breakdown for each alternative should be provided. Costs of concern that were mentioned included equipment and facility modifications, annual operating expenses, transportation, appropriate waste

storage and final disposal. Commentors were concerned about who would bear the costs of plutonium-238 production.

The scope of the proposed *Plutonium-238 Production EIS* was incorporated within the scope of this NI PEIS. DOE has considered all comments originally received from the public during the *Plutonium-238 Production EIS* scoping period in preparing this NI PEIS.

N.1.2 NI PEIS Scoping Comments

The written and oral comments received at the scoping meetings and the additional comments received via U.S. mail, electronic mail, and toll-free faxes and telephone calls during the public comment period were reviewed and considered by DOE in preparing this NI PEIS, along with all comments and input originally received from the public during the *Plutonium-238 Production EIS* scoping period.

In addition to the comments received on the *Plutonium-238 Production EIS*, DOE received approximately 7,000 comments from citizens, interest groups, and other stakeholders during the scoping comment period for this NI PEIS. Campaigns including the same or similar submittals made by multiple people accounted for more than 4,300 comments. Other submittals accounted for more than 2,600 comments. Of the comments received, there were more than 700 unique comments. In some cases, a commentor provided similar or identical comments both orally at the scoping meetings and in writing, so their comments were duplicated.

The comments obtained by DOE throughout the scoping process addressed several key issues. At the scoping meetings on this NI PEIS, the most prevalent concerns are shown below.

- The status of, and commitment to, cleanup at Hanford and the impact of FFTF restart on the existing waste problem.
- There was concern about the lack of justification for the identified missions.
- Commentors requested information about the cost of implementing the various alternatives.
- Commentors repeatedly emphasized the need for an additional alternative calling for the permanent deactivation of FFTF coupled with the No Action Alternative elements, that is, no plutonium-238 production and no additional research and development or medical isotope production beyond existing operating facility capabilities.

As shown in Table N-1, the number of people who commented at the scoping meetings conducted in Oak Ridge, Tennessee; Idaho Falls, Idaho; and Washington, D.C., was smaller in comparison to the meetings held in the Pacific Northwest. At the scoping meeting in Oak Ridge, Tennessee, a commentor was concerned with the relationship of this NI PEIS to other DOE programs and the relative merits of accelerator and reactor performance. The commentor stated the PEIS should include an explanation of mixed oxide fuel disposition. In addition, the commentor supported medical isotope production in Oak Ridge because it is near a transportation hub and some medical isotopes are short-lived; therefore, transportation is key.

At the scoping meetings in Idaho Falls, Idaho, most commentors supported the new missions at the Idaho National Engineering and Environmental Laboratory. The commentors also stated that the socioeconomic impacts of the alternatives need to be considered in the NI PEIS. A commentor stated that decisions in regard to medical isotope production should be based on the needs of the Nation as a whole and not on perceived commercial needs. The commentor also stated that incremental DOE and commercial investments in the

Advanced Test Facility would be sufficient to enhance reactor radioisotope production needs and meet the requirements of the nuclear medicine industry.

At the meetings held in the States of Washington and Oregon, the comments frequently were about FFTF, either supporting or opposing the use of FFTF to accomplish the proposed missions. Many of the commentors who attended the meetings in Seattle, Washington; Portland, Oregon; and Hood River, Oregon, were strongly opposed to the restart of FFTF. As a result of these public comments, DOE added a fifth alternative: the shutdown of FFTF without new production missions. Many commentors stated that the Hanford cleanup mission would be jeopardized, especially when DOE has not met Hanford cleanup milestones.

Most of the comments received at the Richland, Washington, meeting were in support of restarting FFTF. Supporters said restart would not hamper Hanford's cleanup mission, and stated that operation of FFTF could help save the lives of many people by producing isotopes to be used in new ways to treat cancer, heart disease, and other illnesses. Commentors were also concerned about the potential generation of radioactive and hazardous waste as a result of the proposed missions. Commentors stated that DOE should analyze projected waste streams, including health and safety risks and the cumulative impacts to the environment, as well as analyzing impacts from additional spent nuclear fuel storage.

In general, many commentors stated that the PEIS should include a detailed cost analysis of each alternative, including total life-cycle costs. Some commentors stated that DOE has a substantial investment of public resources and money and every effort needs to be made to use FFTF. Others opposed the use of FFTF as a waste of money and stated that keeping FFTF on standby is expensive.

At the scoping meeting in Washington, D.C., the commentors supported the need for medical isotope production. Several commentors were against the restart of FFTF and others stated that DOE needs to consider partnerships with private industry to generate necessary funds for restart. Some commentors thought that a cost study should be prepared and should include avoided future health care costs and cost savings to the national Medicare and Medicaid programs that could be realized by using nuclear isotopes in medical applications. Proliferation concerns were also raised as some commentors stated that: (1) the United States would be sending the wrong message by restarting FFTF; (2) a change in the U.S. nonproliferation policy would be required to import German mixed oxide fuel; and (3) the use of highly enriched uranium would be contrary to existing U.S. nonproliferation policy. Other concerns included waste generation, Hanford cleanup, and safety at FFTF.

N.2 HOW COMMENTS WERE HANDLED

As comments were received during both the *Plutonium-238 Production EIS* and NI PEIS scoping periods, they were logged in, assigned a unique document identification number and placed into the Administrative Record. Comments were identified and assigned to the general categories that are shown in **Table N-3**. By grouping the comments in these categories, DOE representatives were aided in deciding which comments were within or outside the scope of this NI PEIS and which comments needed to be added to the scope of this NI PEIS.

Once the comments were grouped into the categories of comments, they were all reviewed and taken into consideration in the preparation of this Draft NI PEIS. DOE received many comments that were found to be within the scope of this NI PEIS and these comments are addressed in the document. Comments that were added to the scope of this NI PEIS and those that were determined to be outside of the scope of this NI PEIS are summarized in the following sections. All comments were placed in this NI PEIS project Administrative Record.

Table N–3 Categories of Comments

Purpose and need, including medical isotopes, plutonium-238 production, research and development, general irradiation needs, and commercial isotopes
Site-specific recommendations and alternative selection, which included the No Action Alternative, Alternatives 1 through 4 that were included in the Notice of Intent, Alternative 5 that was added as a result of the scoping process, and other general alternative issues
EIS process, including the adequacy of the process, public involvement, the availability of information, the need for additional scoping meetings, and the extension of the comment period
Impacts to the environment in the areas of geology and soils, socioeconomics, environmental justice, cumulative impacts, and general environmental contamination from the proposed action
Public and occupational safety and health
Waste and spent nuclear fuel generation, storage, and disposition
Transportation
Decontamination and decommissioning of facilities
Applicable laws, regulations, and other requirements, including general issues, licensing of facilities, and external regulations of facilities
Costs, including FFTF investment and the cost of each alternative
Other miscellaneous issues, including the cleanup of Hanford, the suggestion that no new missions would be appropriate for Hanford, and antinuclear and non-proliferation-related comments

N.3 COMMENTS THAT WERE ADDED TO THE SCOPE OF THIS NI PEIS

Some comments were received during both the *Plutonium-238 Production EIS* and NI PEIS scoping periods that DOE representatives added to the scope of this NI PEIS. These comments are highlighted in the following sections.

N.3.1 Plutonium-238 Comments Added

- Commentors were opposed to any new missions or operations at Hanford that would generate additional nuclear waste. Information has been added to this NI PEIS addressing potential waste generation and other environmental impacts associated with the proposed missions.
- Commentors proposed the use of non-DOE facilities for irradiation services. The addition of non-DOE facilities, such as a commercial light water reactor, is an existing radiation source that DOE will consider to meet the requirements of the plutonium-238 production mission. The ability of the commercial light water reactor to meet the requirements of the other proposed isotope production missions is addressed in this NI PEIS.
- Commentors requested additional meetings in Washington and Oregon at the *Plutonium-238 Production EIS* scoping meetings in November 1998. The public meetings for this NI PEIS were expanded to include Seattle, Washington; Portland, Oregon; and Hood River Oregon, in addition to the Richland, Washington, meeting.

N.3.2 NI PEIS Comments Added

- Commentors strongly suggested that DOE shut down FFTF. In response to public comment, DOE has added to the NI PEIS a new alternative (Alternative 5) to permanently deactivate FFTF, with no new missions at Hanford.
- Commentors were concerned about the restart of FFTF and budget constraints. DOE has made a commitment that implementation of the Record of Decision will not divert or reprogram budgeted funds designated for Hanford cleanup, regardless of the alternative(s) selected.
- Commentors stated that DOE should adhere to the Tri-Party Agreement. DOE has completed more than 900 Tri-Party Agreement milestones and targets with more than a 98 percent on-time completion rate. The Tri-Party Agreement is a living document and is routinely modified in accordance with procedures defined by the agreement. DOE alone cannot modify the agreement. Implementation of any of the proposed missions at Hanford would not be in conflict with the land use plan or the Tri-Party Agreement.
- Commentors suggested that this NI PEIS should include information on the stewardship of FFTF. There would be no transfer of FFTF stewardship when it is in the standby, startup, or operating mode. This NI PEIS addresses the transition of FFTF stewardship after it is deactivated.
- Commentors suggested that European regulatory and government issues associated with the export of SNR-300 fuel be addressed in this NI PEIS. It is anticipated that a “Nuclear Infrastructure Nonproliferation Impacts Assessment” report would address the export issue.

N.4 OUT OF SCOPE COMMENTS

Some comments were received by DOE that were determined to be outside the scope of the environmental impact analyses of this NI PEIS. The major comments that fall into this group are summarized below for comments received related to both the *Plutonium-238 Production EIS* and this NI PEIS.

N.4.1 Plutonium-238 Out of Scope

- Commentors voiced both support and opposition to the NASA space program and the use of radioisotopes for space exploration in particular. This NI PEIS does not address the merits of the space program or the desirability of radioisotope use in space missions. Those questions fall under the purview of NASA. This NI PEIS is concerned only with the question of how to provide for the identified plutonium-238 requirements for space missions.
- Commentors requested additional information and analysis of the costs associated with the different alternatives. This NI PEIS is required by regulation to examine the environmental impacts of the identified alternatives. Cost information to support the Record of Decision is developed separate from this NI PEIS.
- Commentors voiced concern over the continued production of plutonium by the United States. This NI PEIS is limited to the examination of environmental impacts resulting from the production of plutonium-238 only. Plutonium-238 is not weapons-grade material. In fact, plutonium-238 is a contaminant in weapons-grade plutonium (plutonium-239) that degrades weapon performance.

N.4.2 NI PEIS Out of Scope

- Commentors requested additional analysis on medical isotope demand and the benefits associated with medical isotope use. This NI PEIS evaluates the environmental impacts of medical isotopes production given a projected production level. However, the demand and associated benefits are described in the report, *Expert Panel: Forecast Future Demand for Medical Isotopes* (Wagner et al. 1998).
- Commentors requested additional analysis of alternative power sources for space vehicles and the production requirements for plutonium-238. This NI PEIS evaluates the environmental impacts of producing plutonium-238 in the quantity required by the space program. NASA is responsible for evaluating alternative energy sources for space vehicles and determining the desirability of plutonium-238 usage for power.
- Commentors expressed both support and opposition to restarting FFTF and requested additional risk/benefit analysis and safeguards associated with the FFTF restart alternative. This NI PEIS evaluates the risks and environmental impacts associated with FFTF restart (and all other alternatives). The evaluation of benefits occurring from the implementation of any alternative is covered in separate documents and will be taken into consideration in developing the Record of Decision. The subject of additional safeguards for FFTF restart, that is, commitment to Nuclear Regulatory Commission oversight, is an operational issue to be considered only if FFTF restart is selected in the Record of Decision.
- Commentors requested additional analysis on the environmental effects of combining radioactive waste from alternative implementation and existing hazardous wastes, such as, pesticides. Some commentors voiced opposition to any additional radioactive waste production. This NI PEIS evaluates the environmental and health impacts of the wastes produced by the alternatives. Wastes produced from other activities, for example, pesticide application, are not required to be evaluated in this document. Additionally, this NI PEIS evaluates the impacts of wastes generated by the alternatives and identifies those alternatives that result in no additional waste produced.
- Commentors requested additional cost analysis for alternatives. This NI PEIS evaluates the environmental impacts associated with the implementation of the alternatives. Cost analysis is not required to be included in an EIS, although it would contribute to a decision made in the Record of Decision.

N.5 REFERENCES

Code of Federal Regulations

40 CFR Section 1501.7, “Scoping,” Council on Environmental Quality.

Federal Register

63 FR 53398, U.S. Department of Energy, 1998, “Notice of Intent to Prepare an Environmental Impact Statement for the Proposed Production of Plutonium-238 for Use in Advanced Radioisotope Power Systems for Future Space Missions,” October 5.

64 FR 50064, U.S. Department of Energy, 1999, “Notice of Intent to Prepare a Programmatic Environmental Impact Statement for Accomplishing Expanded Civilian Nuclear Energy Research and Development and Isotope Production Missions in the United States, Including the Role of the Fast Flux Test Facility (DOE/EIS-0310),” September 15.

Other

Wagner et al., 1998, *Expert Panel: Forecast Future Demand for Medical Isotopes*, presented in Arlington, VA, Medical University of South Carolina, Charleston, SC, September 25–26.